THE STATE OF WISCONSIN APPROVAL PROCESS

FOR DREDGING OF COMMERCIAL PORTS

GUIDANCE FOR APPLICANTS AND WDNR STAFF

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
Scott Hassett, Secretary

Wisconsin Department of Natural Resources Box 7921 Madison, WI 53707-7921

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TABLE OF CONTENTS

Acknowledgments:

The collaborative efforts of the Wisconsin Commercial Ports Association (WCPA) are greatly appreciated. Thanks also for the constructive comments from reviewers within the WDNR and the WCPA.

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February 12, 2004

Mr. Dean R. Haen, President
Wisconsin Commercial Ports Association
2561 S. Broadway
Green Bay, WI 54304

Dear Mr. Haen:

I am pleased to transmit the guidance document entitled " The State of Wisconsin Approval Process for Dredging of Commercial Ports" to the Wisconsin Commercial Ports Association (WCPA). This document is the result of an effort by the WCPA and the Wisconsin Department of Natural Resources (WDNR) to improve the process of obtaining approval to complete navigational dredging needed for our commercial ports. As you know, this process began nearly two years ago when your organization contacted us and asked us to work with you and other interested parties on the dredging, disposal and beneficial reuse aspects of navigational dredging projects in Wisconsin. We appreciate the time and effort that your organization put forth.

This step by step guide will improve the process by which commercial ports can apply for approval for dredging projects. In addition, the appointment of a project manager for each commercial port dredging project and the appointment of a regional dredging project coordinator and in each of our Regions with commercial ports will further facilitate the review and approval process.

Enclosed with this letter are 15 copies of this guide for distribution to members of your organization. I am also transmitting this document to staff within the WDNR that are involved in the approval process for navigational dredging. We will have this document available on the WDNR Website.

Thank you for working so closely with us on this effort. We would appreciate continuing dialogue and any feedback as this guidance is implemented. Please contact, Greg Hill, our statewide dredging coordinator, at 608-267-9352 with any questions you may have regarding this transmittal or other dredging issues.

Sincerely,

Scott Hassett, Secretary

THE STATE OF WISCONSIN APPROVAL PROCESS FOR DREDGING OF COMMERCIAL PORTS

GUIDANCE FOR APPLICANTS AND WDNR STAFF

JANUARY, 2004

Introduction and Purpose

Navigational dredging of sediment at Wisconsin's 13 major commercial ports is a necessary activity in order to maintain the ability of these facilities to provide a corridor to handle the nearly 40 billion dollars of liquid and dry freight that are essential to the state's economy. Each year in Wisconsin there's a need to remove approximately 1 million cubic yards of sediment from our navigational channels. Dredging of this sediment and the management of the material removed requires a major work effort for Wisconsin's commercial ports.

State law requires the Wisconsin Department of Natural Resources (WDNR) to evaluate the environmental impacts of the dredging of the sediment and grant the necessary permits and approvals before dredging can take place. It is in the best environmental and economic interests of the state to maintain a consistent and timely review process of these dredging projects.

This guidance document is the culmination of nearly two years of workgroup meetings between the Wisconsin Commercial Ports Association and the WDNR to improve the process of obtaining permits and approvals for navigational dredging.

Applicability

This document is intended to cover navigational dredging for shipping cargo and freight in Wisconsin's commercial ports. It is intended to include dredging in the main navigational channel as well as dredging from the main navigational channel to a particular commercial shipping dock within the commercial port. Although some portions of the guidance (e.g. statewide, regional and project coordinators) are not applicable to other dredging projects, the guidance may prove useful for other projects such as marinas and recreational boating that require the removal of sediment from Wisconsin's waters. This guidance only describes WDNR state approvals and does not cover any federal or local approvals that may be required for a particular project. This guidance is not directly applicable to U.S. Army Corps of Engineers dredging of commercial ports on the Mississippi River because s. 30.202, Stats., authorizes a separate process under a Memorandum of Understanding (MOU) for disposal of

materials dredged by the Corps of Engineers from the Mississippi, St. Croix and Black rivers. Although this document does not apply directly to dredging projects authorized under s. 30.202, Stats., parts of this guidance may be cited in administration and future revision of the MOU.

Background

In November 2001 the Wisconsin Commercial Ports Association (WCPA) and former WDNR Secretary Darrell Bazzell met to discuss concerns of the WCPA regarding WDNR's review of applications regarding sediment from dredging of commercial ports. Based upon the discussions at that meeting, WDNR agreed to establish a liaison to interface with the WCPA, to identify a person in each WDNR Region, with a commercial port to serve as the initial point of contact for all dredging projects in that Region. In addition, former Secretary Bazzell agreed to convene a group of Department staff to develop guidance in a workgroup setting with WPCA representatives.

The discussions between WDNR and WCPA representatives resulted in identification of key elements for improving the process of obtaining approval by the WDNR to dredge in Wisconsin's commercial ports.

Key Elements for an Improved Process

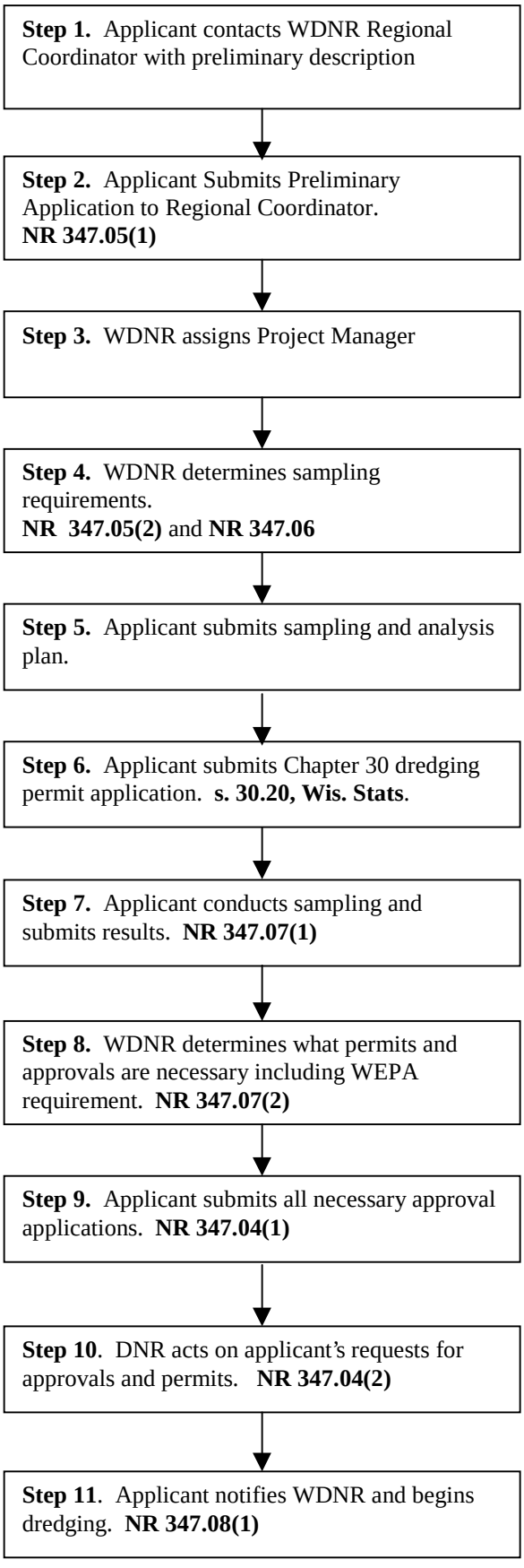
This document describes the step by step process to be used by WDNR staff and dredging project applicants. This step by step process emphasizes certain key elements identified in those discussions between the WDNR, WCPA, and other parties outlined above. These elements include:

1. Early contact of WDNR by applicants, timely and complete submittals of information and applications to WDNR and subsequent timely reviews of dredging requests by WDNR.
2. Effective communication by all parties throughout the process from initial project contact by the applicant to the actual completion of the dredging and disposal or beneficial reuse efforts.
3. A clear understanding of the roles and responsibilities of each of the parties throughout the project.
4. The appointment of a WDNR project manager for each dredging project to ensure coordination of project review across all programs within the WDNR.
5. Documentation of the process for submittal, review, and approval to assure consistency in the review of each project.

Each of these elements is explained in more detail in the step by step process described in the remainder of this guidance.

Flow Chart

The State of Wisconsin Approval Process for Dredging of Commercial Ports



Step - by - Step Description of the Process

The 11-Step State of Wisconsin Approval Process for Dredging of Commercial Ports

Step 1 Commercial Port Applicant Makes Informal Contact With WDNR Regional Coordinator. This step is strongly encouraged to promote early communication between the applicant and the WDNR. WDNR has assigned an overall coordinator for commercial port dredging projects in each WDNR region that has commercial ports. The regional coordinator has overall cross program coordination responsibility for the commercial port dredging program in that region. See Appendix 2 for a description of the responsibilities of the regional coordinator. This step is intended to be a very informal contact (which may be by telephone) to let the WDNR regional coordinator know that a dredging project will be proposed and that a preliminary application will be forthcoming (Step 2). This contact allows the applicant and the regional coordinator to discuss project timing, proposed disposal or beneficial reuse methods, informational requirements for the preliminary application, and go over any questions.

Step 2 Applicant Submits Preliminary Application Per NR 347.05(1). S. NR 347.05(1)(a)-(g), Wis. Adm. Code, lists the information that is required for a Preliminary Application. The Preliminary Application should be submitted to the regional coordinator for commercial port projects. The information that is required for a preliminary application includes:

(a) Volume of material to be dredged;
(b) Name of waterbody and location of project;
(c) Brief description of dredging method and equipment;
(d) Brief description of proposed disposal method and location and, if a disposal facility is to be used, size of the disposal facility;
(e) Any previous sediment sampling (including field observations) and analysis data from the area to be dredged or from the proposed disposal site;
(f) Copy of a map showing the area to be dredged, the depth of cut, specific location of the proposed sediment sampling sites and the bathymetry of the area to be dredged; and
(g) Anticipated starting and completion dates of the proposed project.

It's important that all required information is included in the preliminary application so that unnecessary delays are avoided in later steps of the process.

Step 3 WDNR Assigns a Project Manager and Notifies the Commercial Port Applicant.
WDNR will assign a project manager for each dredging project involving a commercial port. The project manager has responsibility for overall cross program coordination within WDNR for all aspects of that particular dredging project. See Appendix 2 for further description of the responsibilities of project managers. WDNR Regions are encouraged to assign a project manager following step 1 if possible, but in any case the expectation is that WDNR should assign a project manager and notify the applicant within 10 business days of receipt of the preliminary application.

Step 4 WDNR Determines Sampling Requirements and the Notifies Applicant Per NR 347.05(2) and NR 347.06. From existing data, WDNR must determine whether there is reason to believe that any sediment contamination exists within the proposed project area. If there is reason for concern about potential contamination, WDNR conducts a coordinated cross-program review and determines all in-situ sediment sampling that will be required. S. NR 347.05(2), Wis. Adm. Code, requires WDNR to notify the applicant of the sampling requirements within 30 business days of receipt of the Preliminary Application submitted in Step 3. This written notification will include a requirement for the submittal of a Sampling and Analysis Plan. Further details about sampling requirements and how WDNR makes decisions regarding sampling are contained in the WDNR internal guidance document entitled " Guidance for Applying Chapter NR 347, Wisconsin Administrative Code, To Dredging Projects In Surface Waters."

Step 5 Applicant Submits and WDNR Reviews the Sampling and Analysis Plan.
If sampling requirements are established in Step 4, the submittal of a Sampling and Analysis Plan will be required. The Sampling and Analysis Plan allows WDNR a review of the sampling proposal for compliance with NR347 requirements prior to the sampling commencing. The expectation is that the WDNR review and response to the Sampling and Analysis Plan will occur very quickly. For commercial port dredging projects, the target for WDNR response is within 10 business days.

Step 6 Applicant Submits the Chapter 30 Dredging Permit Application.
An applicant could delay submittal of the permit application under Chap. 30, Wis. Stats, until being notified of the need for this permit under s. NR 347.07(2), Wis. Adm. Code (Step 8). However, a Chap. 30 dredging permit is always required and submittal of the application at this point is strongly encouraged. An early submittal of the Chapter 30 dredging permit application provides the WDNR with a better understanding of the project and allows a more efficient and expedited project review.

Step 7 Applicant Conducts Sediment Sampling and Submits Sampling Results Per NR 347.07(1).

In accordance with s. NR 347.07(1), Wis. Adm. Code, when the sampling has been completed and the results are available, the applicant submits a copy of the testing report to the WDNR. The sampling report contents are described in NR 347.07(1) and must include the raw data, a map of the project area showing all specific sampling locations, laboratory quality control and quality assurance information including analytical methods, detection limits and quantitation limits. The applicant may submit the Chapter 30 dredging permit application (Step 6) in conjunction with this report if it has not been previously submitted.

Step 8 WDNR Determines What Permits and Approvals are Required and Whether Additional Information is Needed from the Applicant. Based upon the information submitted under Steps 6 and 7, WDNR identifies which of the approvals listed in s. NR 347.04(1) will be necessary for the particular project. In addition, per NR 347.07(2) and (3), WDNR must also determine whether additional information and sampling is necessary. Finally, WDNR must also make a Wisconsin Environmental Policy Act (WEPA) determination under Chap. NR 150 regarding the need for an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). The WDNR determination and the notification to the applicant must be completed within 30 business days of the submittal of the sampling results under Step 7. The applicant should submit any required additional information or sampling results before or at the time of proceeding to Step 9.

See Appendix 3 for descriptions of permits and approvals that may be needed for dredging projects. Also see s. NR 347.07 for a list permits and approvals that may be required.

Step 9 Applicant Submits All Necessary Applications for Permits and Approvals Per NR 347.04(1). Based upon the determinations made in Step 8, the applicant must apply for all necessary WDNR permits and approvals. If the applicant has not already submitted the Chapter 30 dredging permit application under Step 6, he or she must do so as part of this step. Statutory deadlines and processes specific to each permit or approval apply. The WDNR objective is a timely and coordinated cross program review of all applications.

For commercial port projects, the WDNR project manager is responsible for overall coordination and should be contacted and kept informed regarding any problems or questions related to the project. The WDNR project manager should receive copies of all correspondence related to the project and copies of any permits and approvals. Proactive informal communication between the applicant and the WDNR is encouraged so that there are no unexpected delays in the review process.

See Appendix 3 for descriptions of permits and approvals that may be needed for dredging projects. Also see s. NR 347.07 for a list of permits and approvals that may be required.

Step 10 WDNR Makes Approval and Permit Determinations and Notifies Applicant Per NR 347.04(2). WDNR prepares an NR 150 environmental review document if required and issues decisions for each application submitted under Steps 6 and 9. Statutory deadlines and processes specific to each permit or approval apply. Except as otherwise provided by law, the WDNR decisions on permits and approvals should be made concurrently with the NR 299 Water Quality Certification or the permit under Chap. 30, Wis. Stats. per NR 347.07(2). An opportunity for a public hearing(s) or public informational meeting may be required during this step before the WDNR can issue some types of permits or approvals.

Step 11 Applicant Notifies WDNR Per NR 347.08(1) and Begins Dredging. After all permits and approvals are granted, the applicant is required under NR 347.08(1) to notify the WDNR at least 5 days prior to the time that dredging is to begin.

Appendix 1

Chapter NR 347, Wis. Adm. Code

Unofficial Text (See Printed Volume). Current through date and Register shown on Title Page.
Register, January, 2002, No. 553

Chapter NR 347
SEDIMENT SAMPLING AND ANALYSIS, MONITORING PROTOCOL AND DISPOSAL CRITERIA FOR DREDGING PROJECTS

Note: Chapter NR 347 as it existed on February 28, 1989 was repealed and new chapter NR 347 was created effective March 1, 1989.

NR 347.01 Purpose and policy. (1) The purpose of this chapter is to protect the public rights and interest in the waters of the state by specifying definitions, sediment sampling and analysis requirements, disposal criteria and monitoring requirements for dredging projects regulated under one or more of the following statutes: s. 30.20, Stats., which requires a contract or permit for the removal of material from the beds of waterways; s. 281.41, Stats., which establishes a wastewater treatment facility plan approval program; ch. 289, Stats., which establishes the solid waste management program; ch. 291, Stats., which establishes the hazardous waste program; and ch. 283, Stats., which establishes the Wisconsin pollutant discharge elimination system (WPDES) program.
(2) It is department policy to encourage reuse of dredged material and to minimize environmental harm resulting from a dredging project.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–89; **corrections in (1) made under s. 13.93 (2m) (b) 7., Stats., Register January 2002 No. 553.**

NR 347.02 Applicability. The provisions of this chapter apply to the removal and disposal of material from the beds of waterways except where exempted by statute.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–89.

NR 347.03 Definitions. (1) "Analyte" means the chemical substance or physical property being tested for in a sample.
(2) "Bathymetry" means the measurement of depth of water in lakes or rivers to determine lake or river bed topography.
(3) "Beach nourishment disposal" means the disposal of dredged material on the beaches or in the water landward from the ordinary high–water mark of Lakes Michigan and Superior for the purpose of adding, replenishing or preventing erosion of beach material.
(4) "Bioassay" means a method for determining the acute or chronic toxicity of a material by studying its effects on test organisms under controlled conditions.
(5) "Bulk sediment analysis" means a test to measure the total concentration of a specific constituent in a sample being analyzed.
(6) "Carriage water" means the water portion of a slurry of water and dredged material.
(7) "Carriage water return flow" means the carriage water which is returned to a receiving water after separation of the dredged material from the carriage water in a disposal, rehandling or treatment facility.
(8) "Connecting waterways" means a portion of a navigable lake or stream which is directly joined to Lake Michigan or Lake Superior and which contains a navigation channel providing access for commercial or recreational watercraft to Lake Michigan or Lake Superior.
(9) "Contamination" means a solid, liquid or gaseous material, microorganism, noise, heat, odor, or radiation, alone or in any combination, that may harm the quality of the environment in any way.
(10) "Contract" means a binding written agreement between the department and a dredging applicant authorizing the removal of material from the bed of a natural navigable lake or outlying water.
(11) "Department" means the department of natural resources.
(12) "Disposal facility" means a site or facility for the disposal of dredged material.
(13) "Dredged material" means any material removed from the bed of any waterway by dredging.
(14) "Dredging" means any part of the process of the removal of material from the beds of waterways; transport

of the material to a disposal, rehandling or treatment facility; treatment of the material; discharge of carriage or interstitial water; and disposal of the material.
(15) "Grain size analysis" means a method to determine dredged material and disposal site sediment particle size distribution.
(16) "Hazardous waste", as defined in s. 291.01 (7), Stats., means any solid waste identified as a hazardous waste under ch. NR 605.
(17) "Interstitial water" means water contained in the interstices or voids of soil or rock in the dredged material.
(18) "Limit of detection" means the lowest concentration level that can be determined to be statistically different from a k sample for that analytical test method and sample matrix.
(19) "Limit of quantitation" (LOQ) means the concentration of an analyte at which one can state with a stated degree of confidence for that analytical test method and sample matrix that ananalyte is present at a specific concentration in the sample tested.
(20) "Parent material" means the native unconsolidated material which overlies the bedrock.
(21) "PCBs" means those materials defined in s. 299.45 (1) (a), Stats.
(22) "Particle size distribution" means a cumulative frequency distribution or frequency distribution of percentages of particles of specified diameters in a sample.
(23) "Rehandling facility" means a temporary storage site or facility used during the transportation of dredged material to a treatment or disposal facility.
(24) "Treatment facility" in this chapter means a natural or artificial confinement facility used for the separation of dredged material solids from the interstitial or carriage water.
(25) "Upland disposal" means the disposal of dredged materials landward from the ordinary high–water mark of a waterway or waterbody.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–8**9;** correction in (16) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478.

NR 347.04 Permits, approvals and reviews required. (1)

The following are the permit, approval and review requirements for dredging projects:
(a) Except where otherwise provided by law, all private and municipal dredging projects require a permit or contract under s. 30.20, Stats., and ch. NR 346. Dredging in portions of the Mississippi, St. Croix and Black rivers by the U.S. army corps of engineers is governed by s. 30.202, Stats.
(b) All dredging projects require review under ch. 289, Stats., and chs. NR 500 to 520 for disposal of dredged material under the solid waste management program.
(c) All dredging projects shall be reviewed under ss. 1.11 and 23.11(5), Stats., and ch. NR 150 for compliance with the Wisconsin environmental policy act.
(d) All federally funded, permitted or sponsored dredging projects require water quality certification under ss. 281.11 to 281.22 and 283.001, Stats., and ch. NR 299.
(e) A Wisconsin pollutant discharge elimination system (WPDES) permit under ch. 283, Stats., is required for dredging projects with carriage water return flows to surface water or groundwater.
(f) Plan approval under s. 281.41, Stats., is required for dredging projects which include a dredged material treatment facility.
(g) Sites and facilities for the disposal of hazardous waste and PCBs require review under subch. IV of ch. 291, Stats. and s. 299.45, Stats., and chs. NR 500 to 520 and 600 to 685.
(2) The project application process shall be coordinated by the department. Except as otherwise provided by law, decisions on all applicable department approvals, permits, contracts and licenses relating to a dredging project shall be made concurrently and with the decision on:
(a) Water quality certification under ch. NR 299 for all federally funded, permitted or sponsored projects, or
(b) Permit or contract under s. 30.20, Stats., and ch. NR 346 for all other projects.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–8**9;** corrections in (1)
made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478**.; corrections in (1) (b), (d), (e), (f), and (g) made under s. 13.93 (2m) (b) 7., Stats., Register January 2002 No. 553.**

NR 347.05 Preliminary application and analytical requirements. (1)

Prior to submission of a formal application, anyone seeking to remove material from the beds of waterways shall provide the department with preliminary information including:
(a) Name of waterbody and location of project;
(b) Volume of material to be dredged;
(c) Brief description of dredging method and equipment;
(d) Brief description of proposed disposal method and location and, if a disposal facility is to be used, size of the disposal facility;
(e) Any previous sediment sampling (including field observations) and analysis data from the area to be dredged or from the proposed disposal site;
(f) Copy of a map showing the area to be dredged, the depth of cut, the specific location of the proposed sediment sampling sites and the bathymetry of the area to be dredged; and
(g) Anticipated starting and completion dates of the proposed project.
(2) An initial evaluation shall be conducted by the department within 30 business days after receipt of the information under sub. (1) to determine if there is reason to believe that the material proposed to be dredged is contaminated. This initial evaluation shall be used by the department in specifying sediment sampling and analysis requirements to the applicant under s. NR 347.06 and shall be accomplished with existing data. Factors which shall be considered by the department in its evaluation of the dredging site and, if appropriate the disposal site, include, but are not limited to, the following:
(a) Potential that contaminants may be present. Potential routes that may have introduced contaminants into the dredging site shall be identified by examining appropriate maps, aerial photographs, or other graphic materials that show surface water-courses and groundwater flow patterns, surface relief, proximity to surface and groundwater movement, private and public roads, location of buildings, agricultural land, municipal and industrial sewage and stormwater outfalls, etc., or by making supplemental field inspections.
(b) Previous tests of the material at the dredging site or from other projects in the vicinity when there are similar sources and types of contaminants, water circulation and stratification, accumulation of sediments, general sediment characteristics, and potential for impact on the aquatic

environment, as long as nothing is known to have occurred which would render the comparisons inappropriate.
(c) The probability of past introduction of contaminants from land runoff.
(d) Spills of toxic or hazardous substances.
(e) Introduction of contaminants from point sources.
(f) Source and previous use of materials used or proposed to be used as fill.
(g) Natural deposits of minerals and other natural substances.
(h) Any other relevant information available to the department.
History: Cr. Register, February, 1989, No. 398, eff. 3–1–89.

NR 347.06 Sampling and analysis. Upon completion of the initial evaluation, the department shall establish sampling and analysis requirements.
(1) EXCEPTION. Except as provided in subs. (3)(a) and (6), the applicant shall collect and analyze data on sediments to be dredged in the manner outlined in this section.
(2) CORRECT METHODS. Unless otherwise specified, sampling, sample handling and sample analysis to demonstrate compliance with this section shall be in accordance with methods from applicable sources enumerated in ch. NR 149.
(3) NUMBER OF SAMPLES. (a) Sediment sampling may be waived by the department if it determines from its review of available information under s. NR 347.05(2) that sediment contamination is unlikely.
(b) If available information is either insufficient to determine the possibility for sediment contamination, or shows a possibility for sediment contamination, the department shall require the applicant to collect sufficient samples to describe the chemical, physical and biological properties of the sediment. The exact number and location of sediment samples required and analyses to be conducted shall be specified by the department, in consultation with the applicant, based on the initial evaluation and on other factors including, but not limited to, the potential for possibility of contamination, volume and aerial extent of material to be dredged, depth of cut and proposed method of disposal.
(c) For a project involving the disposal of dredged material at an upland disposal site, the department may require samples to be taken from the proposed disposal site and analyzed for parameters found to be elevated in the dredged material sediment samples. The number and location of disposal site samples required shall be specified by the department based on the size and other characteristics of the site.
(d) For a project to be conducted in the Great Lakes with beach nourishment disposal, at least one sample every 250 linear feet of beach with a minimum of 2 samples shall be taken from the proposed beach nourishment disposal site and analyzed for particle size and color. Core or grab samplers may be used.
(4) METHOD OF TAKING SAMPLES. (a) All samples shall be taken with a core sampler except as provided in sub. (3)(d). The department may approve other sampling methods if it finds them to be appropriate.
(b) All sampling equipment shall be properly cleaned prior to and following each sample collection.
(c) Samples collected for PCB, pesticide and other organic analyses shall be collected and processed using metallic (stainless steel preferred) liners, tubs, spoons and spatulas. Samples collected for other chemical analysis, including heavy metals, shall be collected and processed using non–metallic liners, tubs, spoons and spatulas.
(d) Core samples from the dredging site shall be taken to the proposed dredging depth plus 2 feet.
(e) Core samples shall be visually inspected for the existence of strata formation, and a written description including position, length, odor, texture and color of the strata shall be provided to the department.
(5) SAMPLE HANDLING AFTER COLLECTION AND PRIOR TO ANAL-YSIS. Sample handling and storage prior to analysis shall be in accordance with the maximum holding times and container types given in table F of ch. NR 219. Samples shall be preserved at the time of collection by cooling to 4°C.
(6) ANALYSES TO BE PERFORMED ON SEDIMENT SAMPLES. Analyses shall be done in accordance with methods from applicable sources enumerated in ch. NR 149. Analyses submitted to the department under this chapter shall be done by a laboratory certified or registered under ch. NR 149.
(a) Samples shall be analyzed from each distinct layer observed in the material to be dredged. If no strata formation exists, core samples shall be divided into 2–foot segments, and each segment shall be analyzed for the required chemicals and characteristics. For cores extending into parent material, analysis of only the top 2–foot segment of parent material is required. The department may approve other subsampling methods if it finds them to be appropriate.
(b) All samples shall be analyzed for those parameters listed in table 1 unless waived by the department as provided in par. (d). Elutriate testing may be required for all chemicals listed in Table 1 unless waived by the department as provided in par. (d).
(c) If previous sampling data or other adequate available information indicates the possibility of contamination by chemicals not listed in table 1, the department may require analysis for those chemicals.
(d) If previous sampling data or other adequate available information demonstrates that the possibility of contamination is negligible, analysis for any chemical may be waived, in writing, by the department.
(e) The department may require additional samples and analyses as specified by law or for other appropriate reasons.

TABLE 1
ANALYSES TO BE PERFORMED ON SEDIMENT SAMPLES

	GREAT LAKES	INLAND WATERS
PCB (Total)	X	X
Total 2,3,7,8 TCDD	X	X
Total 2,3,7,8 TCDF	X	X

	GREAT LAKES	INLAND WATERS
Aldrin	X	X
Dieldrin	X	X
Chlordane	X	X
Endrin	X	X
Heptachlor	X	X
Lindane	X	X
Toxaphene	X	X
DDT	X	X
DDE	X	X
Arsenic	X	X
Barium	X	X
Cadmium	X	X
Chromium	X	
Copper	X	X
Cyanide	X	
Iron	X	
Lead	X	X
Manganese	X	
Mercury	X	X
Nickel	X	X
Selenium	X	X
Zinc	X	X
Oil and Grease	X	X
NO_2, NO_3, NH_3–N, TKN	X	X
Total P	X	X
Grain–size	X	X
Percent Solids	X	X
Total Organic Carbon	X	X
Moisture Content	X	X
Settleability (if return water)	X	X

History: Cr. Register, February, 1989, No. 398, eff. 3–1–89; am. (5) and (6) (intro.), Register, November, 1992, No. 443, eff. 12–1–92.

NR 347.07 Review procedures and review criteria.
(1) When sediment sampling and analyses have been completed, the applicant shall submit a copy of the testing report to the department. This report shall include raw data for all analyses, a map of the project area showing the specific locations of sediment sampling sites and the name and address of the laboratory which per-formed the tests. All testing and quality control procedures shall be described and analytical methods, detection limits and quantification limits shall be identified.
(2) The department shall review the information submitted under sub. (1) within 30 business days after receipt and determine the applicable statutory and administrative rule provisions and any additional information required from the applicant under this section.
(3) Based on the submitted testing report the department may after consultation with the applicant require additional sediment sampling and analyses when there is evidence of contamination.
(4) For projects in the Great Lakes involving beach nourishment disposal, grain–size analysis results of the proposed dredged material and the beach shall be compared by the department.
(a) The department may allow beach nourishment disposal if:
1. The average percentage of silt plus clay (material passing a #200 sieve or less than .074 mm dia.) in the dredged material does not exceed the average percentage of silt plus clay in the existing beach by more than 15% and the color of the dredged material does not differ significantly from the color of the beach material.
Note: For example, if the silt plus clay content of the existing beach is 10%, suit-able
dredged material must have a silt plus clay content of less than 25%.

2. The criteria of any general permit regulating wastewater discharges under the Wisconsin pollutant discharge elimination system is not exceeded.

(5) For all projects where upland disposal is required or planned, the results of sediment sampling and analysis shall be compared by the department to the solid waste disposal standards and criteria specified in chs. NR 500 to 520.

(6) If the bulk sediment analysis criteria in sub. (4) is exceeded, the applicant shall have the option of demonstrating to the department through use of bioassay, or other methods approved by the department, that the dredging and sediment disposal operations will have minimum effects on the environment.

History: Cr. Register, February, 1989, No. 398, eff. 3–1–89; correction in (5) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478.

NR 347.08 Monitoring, reporting and enforcement.

(1) SURVEILLANCE. (a) The permittee shall contact the department 5 business days prior to the commencement of dredging to provide an opportunity for the department to review all required environmental safeguards to ensure they are in place and operable.

(b) The department may inspect the dredging project at any time during operation to determine whether requirements of permits and approvals are being met or to conduct effluent sampling.

(2) MONITORING. (a) For those projects authorized in part by a WPDES permit, monitoring, analyses and reporting shall be performed as specified in the WPDES permit.

(b) For all other projects, monitoring, analyses and reporting shall be performed as specified in ss. NR 347.06(2) and 347.07(1).

(c) Project characteristics to be monitored may include, but are not limited to, carriage water return flow, total suspended solids, dissolved oxygen concentrations, effluent and receiving water temperatures, receiving stream flow rates, effluent ammonia–ni-trogen concentrations, and pH.

(3) SUSPENSION OF WORK. If the department determines that project performance is not in compliance with permit or contract conditions, the permittee shall suspend work upon written notification from the department. This shall be a condition of any permit or contract issued by the department. The permittee shall be accorded an opportunity for hearing in accordance with s. 227.51(3), Stats. The issuance of a suspension order under this subsection shall not limit other enforcement actions or penalties. The department and permittee shall analyze operational deficiencies and the department shall prescribe changes necessary to bring project operation into conformance with permit or contract conditions.

(4) PENALTIES. (a) Each violation of the conditions of a permit or contract issued under s. 30.20, Stats., or this chapter, may result in a forfeiture of not less than $100 nor more than $10,000 for the first offense and shall forfeit not less than $500 nor more than $10,000 upon conviction of the same offense a second or subsequent time. The permit or contract may be rescinded and appropriate restoration orders may be issued as authorized by ss. 23.79, 30.03, 30.12, 30.15, 30.20, 30.292, 30.294 and 30.298, Stats.

(b) The enforcement provisions of s. 283.91, Stats., shall apply to any violations of WPDES permits associated with dredging projects.

(c) The enforcement provisions of ss. 289.97 and 299.97, Stats., and chs. NR 500 to 520 shall apply to violations of solid waste management approvals for this chapter.

(d) The enforcement provisions of ss. 291.95 and 291.97, Stats., shall apply to violations of any hazardous waste approvals for disposal activities associated with dredging projects authorized by this chapter.

History: Cr. Register, February, 1989, No. 398, eff. 3–1–89; corrections in (4) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478**; corrections in (4) (b) to (d) made under s. 13.93 (2m) (b) 7., Stats., Register January 2002 No.**

Appendix 2

WDNR Staff Roles and Responsibilities for Commercial Port Dredging Projects

1) Statewide Coordinator

The WCPA has requested that the WDNR name an overall statewide coordinator for commercial port dredging projects. The role of the statewide coordinator is:

- To assure consistency in implementation of WDNR policy and guidance;
- To serve as liaison with the WCPA on statewide issues related to commercial ports dredging projects;
- To communicate and coordinate across WDNR program lines statewide commercial port dredging issues; and
- To represent the WDNR in interactions with federal agencies and other states.

The statewide coordinator should be consulted on statewide cross program issues, on issues related to consistency between regions, or on implementation of statewide policy.

Note: As of the date of publication of this guidance, Greg Hill is the designated Statewide Coordinator for commercial port dredging projects. Contact: Greg Hill; Greg.Hill@dnr.state.wi.us 608-267-9352.

2) Regional Coordinators

At the request of WCPA, the WDNR has named a regional coordinator for commercial port dredging for each WDNR region with commercial ports. The responsibility of the regional coordinator is to assure consistency and cross-program coordination on commercial port dredging issues within that WDNR region and to represent the region on statewide issues. The regional coordinator should be the initial point of contact before a project manager is named for a particular project. The regional coordinator may also be contacted if there is a question or dispute that cannot be resolved with the project manager.

The regional coordinator will contact the regional Water Leader and the regional Air and Waste (AW) Leader within that WDNR region when there is a need for a project manager to be named. The regional coordinator may recommend the name of a project coordinator to the regional AW and Water leaders.

Note: As of the date of this publication, the following persons were designated as a Regional Coordinator for commercial port dredging projects.

Northern Region: Duane Lahti, NOR Watershed Management Program
Duane Lahti@dnr.state.wi.us 715-395-6911

Southeast Region: Rob Grosch, SER Waste Management Program
Robert.Grosch@dnr.state.wi.us 262-574-2148
Northeast Region: Kristy Rogers, NER Aquatic Habitat Coordinator
Kristy.Rogers@dnr.state.wi.us 920-492-5817

3) Project Managers

Whenever a commercial port dredging project is proposed, the WDNR Region will name a project manager for that project and inform the applicant within 10 days of receipt of the preliminary dredging application (Step 3 of the 11-step process). The project manager's role is cross-program coordination and communication on all aspects of the proposed project. The project manager is the principal liaison between the applicant and the WDNR. When approvals or permits are needed, direct communication between the applicant and the lead WDNR reviewer for a particular permit or approval is encouraged, however the project manager should receive copies of all correspondence and should be kept fully informed and appraised of communications and progress on the project.

Appendix 3

Descriptions of Permits, Approvals and Other Requirements That May Apply to Dredging Projects

A. Chapter 30 Dredging Permits.

All projects that involve dredging or removing bottom material from the bed of a waterway require a Dredging Permit under section 30.20, Wisconsin Statutes. Applicants submit preliminary plans that show the location, extent and volume of proposed dredging, along with the proposed disposal site or beneficial reuse option. DNR staff identify any sediment sampling requirements needed to determine if the sediment is contaminated, and the applicant conducts sampling. When a final permit application is received, DNR staff evaluate the impacts of proposed dredging and disposal on wetlands, fish and wildlife habitat, and on other public rights in navigable waters, including navigation. If the project involves 3000 cubic yards or greater of material to be dredged, DNR prepares an Environmental Assessment to evaluate the project in greater detail. A Dredging Permit is granted if DNR determines that the work can be done, perhaps with certain permit conditions, in a manner that will not harm public rights in Wisconsin waters.

B. Wastewater Treatment Facility Plan Review

If a dredging project include s a dredged material treatment facility, the facility may not be constructed or operated unless the plans and specifications for the proposed facility have been reviewed and approved by the WDNR. Procedures for submission of plans and specifications for wastewater treatment facilities are contained in Chapter NR 108, Wis. Adm. Code. According to s. 281.41(1)(b), Wis. Stats., the WDNR must review and approve or deny the plans and specifications within 90 days following their receipt.

C. WPDES - Wastewater Discharge Permits.

A Wisconsin Pollutant Discharge Elimination System (WPDES) wastewater discharge permit is required under Chapter 283, Wis. Stats., and Chapter NR 200, Wis. Adm. Code, for a point source discharge of pollutants into the waters of the state. Wastewater discharge permits are applicable to dredging operations that discharge carriage and/or interstitial water, and small amounts of the dredged material resulting from the disposal or temporary storage.

General WPDES Permit

General Permit. In some cases, the removed sediment is essentially innocuous. Consequently, any return of water and small amounts of the dredged material from the disposal site to waters of the state are also innocuous and can be covered by a Dredging Operations general permit (WPDES Permit No. WI-0046558-3).

Provisions have been included in the General Permit for the disposal of dredged sediments in Lake Michigan and Lake Superior via beach nourishment and unconfined disposal. These activities are defined as follows:

> Beach nourishment: The disposal of dredged material on the beaches or in the water landward from the highwater mark of Lakes Michigan and Superior for the purpose of adding, replenishing or preventing erosion of beach material.
>
> Unconfined disposal: The deposition of dredged sediments, in water, on the bed of a waterway. Typically, state law prohibits disposal of dredged sediments via unconfined disposal. However, unconfined disposal may be allowed where the lake bed in the dredged disposal area has been granted to a local government entity. See Sections 30.12(1), 30.202, 30.203, and 30.11, Stats.
>
> Disposal via these means is allowed only if the following two conditions are met: the particle size of the dredged material must meet the requirements of s. NR 347.07(4)(a)1, Wis. Adm. Code and the dredged material must meet the background criteria for uncontaminated sediment identified in the General Permit - WPDES Permit No. WI-0046558-3.

Specific WPDES Permit

Specific WPDES Permit. A Specific Permit is necessary in situations where there exists a possibility of violating surface or groundwater quality standards (NR 102, 105, 106, and 140). For situations where specialized environmental controls are necessary the discharge will be regulated by a specific permit. In general if bioaccumulating compounds are present, regulation of these substances requires a specific permit. Discharges to outstanding and exceptional resource waters requires a specific permit which provides the oversight and discharge limitations necessary to protect these types of receiving waters.

D. NR 299 Water Quality Certification

Chapter 299, Wis. Adm. Code, contains procedures and criteria for application, processing and review of water quality certifications required by the Federal Water Pollution Control Act. A water quality certification is required for any federally funded, permitted or sponsored dredging project.

E. NR 500 Solid Waste Regulation and Approvals

Dredged material is considered a solid waste under Wisconsin statutes and case law. As explained below, however, disposal of most dredged material is exempted from normal solid waste regulation by the WDNR's Waste Management Program (s. 289.43(8), Wis. Stats, and s. NR 500.08(3), Wis. Adm. Code).

Wisconsin's solid waste statutes (Ch. 289, Wis. Stats.) and regulatory codes (chs. NR 500 through NR 520, Wis. Adm. Code) are primarily directed at the regulation of complex land disposal facilities, also referred to as solid waste landfills. Dredged material disposal sites can be regulated in a manner similar to landfills; however, most are exempted from solid waste program regulation by rule or on a case-by-case basis. Projects likely to be subject to formal regulation are those that include large volumes of dredged material, contaminated dredged material, engineered structures, or those proximate to a protected resource such as wetlands.

Dredged Material Wastes Exempt by Rule

S. NR 500.08(3), Wis. Adm. Code, lists several types of facilities for disposal of non-contaminated dredged material which are exempted by rule. For those facilities that qualify for this exemption, any Department requirements for disposal would be exercised through the dredging permit. Formal solid waste regulation would not be invoked, as long as the disposal site complied with performance standards of s. NR 504.04(4), Wis. Adm. Code. This exemption by rule is based on certain presumptions about the environmental impact of projects. Where the WDNR has enough information to judge that the sediment is not contaminated or where disposal will not cause problems, the exemption by rule can apply.

The NR 500.08(3) exemption by rule does not apply to volumes of 3,000 cubic yards or greater from the Great Lakes, the Mississippi River and certain water bodies where historical contamination or a large number of dischargers existed or is still present. The exemption by rule also does not apply if the WDNR has reason to believe that the performance standards of s. NR 504.04(4), Wis. Adm. Code would be violated.

Dredged Material Wastes Exempt Following Case-by-Case Review

According to s. 289.43(8), Wis. Stats., the WDNR can exempt certain solid waste facilities from the licensed landfill siting process on a case-by-case basis . The applicant still has to demonstrate that the project will not cause violations of standards or threaten protected resources, like groundwater quality, surface water quality, wetland functional values, critical habitat, or endangered species.

The intent of this statute is to allow the applicant to tailor the design, active life, closure, etc., of the disposal facility to the size and requirements of the dredging project. The exemption can require a facility design with any type containment needed, ranging from

filling a depression in the landscape to an engineered design with a liner, leachate collection, and final cover similar to a licensed landfill.

An applicant has to prepare a plan and submit an application to the WDNR for case-by-case review. The WDNR recommends that the following items to be included as part of a request for a grant of exemption:

- de-water dredged material as much as possible to allow for proper placement.
- disposal in an upland location that is not a wetland, critical habitat area, recharge area for private or public water supply wells
- confine to as limited an area as practicable
- confine to as limited a volume as practicable
- cover with soil if necessary to prevent erosion and direct contact. (Thicker cover (1 to 3 feet) may be necessary if there is greater concern for contact.)
- post-dredging reporting to the WDNR to document the disposal location, cover, volume used, changes made, etc.

It is also possible that the WDNR would require a greater degree of containment or isolation due to higher contaminant concentrations, greater concern about toxicity or leaching of certain types of contaminants or other factors. Early discussion with WDNR staff will help to define degree of containment that has to be designed for.

Public Meeting Required for Solid Waste Decisions

Before a formal solid waste approval can be issued, s. 289.54, Wis. Stats., requires the WDNR to hold a public meeting in the city, village or town where disposal of dredged material is proposed to take place. The statute specifically states that this is applicable to any dredged material that contains PCBs or heavy metals in concentrations of less than 50 ppm. Given that dredged material will show a range of concentrations, the effect of this statute is to require a public meeting prior to issuing a Waste Management program approval for <u>any</u> dredged material disposal project. At these meetings, the Department will expect the applicant to present an overview of the proposal. Comments will be recorded and considered for utility in the approval requirements. If the dredged material is determined to be exempt from solid waste regulation (either by rule or on a case-by-case basis), then no public meeting is required.

Beneficial Reuse of Dredged Materials

According to s. NR 500.08(5), Wis. Adm. Code, the WDNR may grant exemptions from normal solid waste regulatory requirements for the purpose of allowing or encouraging the recycling of solid wastes. While there is no specific beneficial reuse code applicable to dredged material, s. NR 347.01(2) states the WDNR policy of encouraging the beneficial reuse of dredged materials. Beneficial reuse can be addressed under the

dredging permit, for projects which are eligible for the code exemption under s. NR 500.08(3), or by a case-by-case low hazard exemption under s. 289.43(8), Wis. Stats.

In support of the WDNR's policy to encourage beneficial reuse projects, the WDNR is a member of the Great Lakes Dredging Team and contributes to the beneficial reuse initiative and guidance documents developed by that Team (see www.glc.org/dredging). Examples of a beneficial reuse projects include landfill cover as approved in a Plan of Operation, habit creation, beach nourishment, construction fill materials, and soil amendment.

Landspreading of Dredged Materials

This alternative is not commonly used and is probably most applicable to inland lake dredging projects with highly organic, mucky sediments which can be easily removed and land-applied by hydraulic pumping. At a minimum, it has to be shown that the use of the dredged material will cause no harm or additional contamination. For landspreading proposals, it is desirable to be able to demonstrate a benefit for the intended use of the land.

There are two possible WDNR Waste Management regulatory approaches for landspreading projects.

A landspreading plan can be accepted and reviewed under Chap. NR 518, Wis. Adm. Code. This is most applicable to repetitive dredging actions. Code requirements are similar to the information required for land application of municipal treatment plant sludge. A formal approval will be issued following one step review process. No solid waste license is required but plan review fees are listed in Chap. NR 520, Wis. Adm. Code. The dredged material would have to be characterized, and appropriate land application limits would have to be defined on a case-by-case basis.

Land application can also be allowed under the low hazard case-by-case grant of exemption under s. 289.43(8), Wis. Stats. This approach is more appropriate for one-time dredging actions.

Approval to Dispose of Dredged Materials in an Existing Landfill

Disposal of dredged material in an existing licensed solid waste landfill involves relatively little direct interaction with the Department but does require negotiations with the landfill operator. A landfill that does not already have an approval to accept dredged material would have to submit a modification to its plan of operation to the WDNR.

Landfill disposal is not a popular choice for dredged material that is considered to be uncontaminated, but it may be the most practical choice for smaller dredging projects dealing with contaminated dredged material. In some instances, the landfill operator can use dredged material for certain landfill construction purposes.

Approval of a New Landfill for Dredged Materials

For dredged material that is not eligible for the code-based or a case-by-case exemption, disposal in a dedicated licensed landfill is possible. The applicant would have to follow the licensed landfill siting process in ch. 289, Stats., and chs. NR 500 to NR 520, Wis. Adm. Code. This process is well defined, but highly intensive in terms of demands on time and resources. It can take 3 to 7 years to complete.

Historically, there have been few efforts to site licensed landfills solely for dredged material, and none of those efforts were pushed to completion. This alternative is most likely for projects involving large volumes of contaminated sediment, to be dredged over a time span of several years.

Approval to Dispose of PCB-Containing Dredged Material

Some of Wisconsin's waterways have been contaminated with PCBs. The alternatives for disposal of dredged material from those waterways can be subject to different regulatory requirements.

Sediment with PCB concentrations of less than 50 ppm would be regulated as a solid waste under WDNR authority, including Chaps. NR 157 and NR 500 to NR 520, Wis. Adm. Code. Sediment material contaminated by PCBs is usually not eligible for a low hazard exemption unless the concentrations are very low. For higher concentrations, disposal in a licensed landfill is normally required. For lower PCB concentrations, a range of disposal and beneficial reuse options should be considered on a case-by-case basis whether or not the material is deemed eligible for a low hazard exemption. Please refer to Guidance for Landspreading of PCB-Contaminated Solid Wastes - WA-39 for further information regarding landspreading of sediment materials containing PCBs.

Sediment with PCB concentrations of 50 ppm or greater is also regulated under federal law - in the Toxic Substances Control Act (TSCA). Applicants for TSCA-regulated dredged material are advised to dispose of it at an established commercial toxic/hazardous waste landfill rather than attempting to establish their own facility. The process of establishing a new TSCA-approved waste landfill would be at least as laborious as establishing a new solid waste landfill, and probably more so.

TSCA also allows use of a mechanism called the TSCA coordinated approval. This involves WDNR working with USEPA Region 5 on review of an application to dispose of TSCA-level PCB-contaminated dredged material in a Wisconsin licensed solid waste landfill. The possibility of disposing of waste in a landfill that wasn't specifically designed under TSCA requirements is based on the level of engineering and construction oversight that the NR 500 to 520 codes require. Proposed plans by the applicant and the WDNR's review would have to meet certain additional requirements that USEPA Region 5 would expect to see addressed.

Disposal in a Confined Disposal Facility

Historically, a dredged material facility that has been constructed by the US Army Corps of Engineers (Corps) within the ordinary high water mark of a water body has been termed a "confined disposal facility" (CDF). This type of disposal is subject to agreements between local sponsor (municipality) and the Corps. The applicant for any new CDF would have to demonstrate that the facility is eligible for a low hazard exemption under s. 289.43(8), Wis. Stats. In that case, there would be no licensing or other requirements by the Waste Program under the landfill siting laws. However, there would be specific requirements in WPDES permits for the facility. With existing CDFs, the WDNR's Waste Program has been largely concerned with closure plans once the facility has filled to capacity.

F. NR 150 Environmental Impact Determination

According to the Wisconsin Environmental Policy Act (s. 1.11, Wis. Stats.), all state agencies, including the WDNR, must evaluate and be aware of the environmental consequences of their regulatory, management or administrative actions. Section NR 150.03, Wis. Adm. Code, establishes a "Type List" which categorizes WDNR actions. For dredging projects, each WDNR action on a permit or approval would be categorized from the NR 150.03 Type List and there would be an opportunity for public input.

For a dredging permit under s. 30.20, Wis. Stats., the following would be considered a Type II action: 1) over 3000 cubic yards being dredged, 2) a potential for sediments characterized as a hazardous substance and involving more that 7 cubic yards being dredged, or 3) draining or filling of wetlands affecting more than five acres. Type II actions require the preparation of an Environmental Assessment (EA) and may require the preparation of an Environmental Impact Report (EIR). If the proposed action is determined to be a "major action significantly affecting the quality of the human environment," an Environmental Impact Statement (EIS) will be a required.

*(**Note Regarding Appendix 3**: This appendix contains a summary of WDNR requirements that may be applicable to dredging projects for commercial ports. This is not a complete listing of all state, federal and local requirements that could be applicable to a dredging project. See the legal notice and disclaimer on page 2 of this publication.)*